

IN THE CLAIMS:

Claims 1 - 39 have been cancelled. Claims 40 – 78 have been added.

Claims 1 - 39 (cancelled).

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B2 40. (New) A method for generating a retrieval object map, said method comprising:

pre-storing an expression word map, in which a plurality of expression words expressing impressions of retrieval objects are arranged on a virtual space depending upon a degree of association of the impressions;

pre-storing a plurality of retrieval objects corresponding to said expression words;

deriving a position of at least one expression word corresponding to each said retrieval object, wherein when a plurality of expression words correspond to a retrieval object, the position is defined in the following manner:

if a distance between coordinates of said plurality of expression words is less than or equal to a predetermined distance, average coordinates of the coordinates of said plurality of expression words are taken as coordinates of the position of a single expression word corresponding to said retrieval object, and

if the distance is greater than the predetermined distance, respective coordinates of said plurality of expression words are taken as the position of the at least one expression word; and

generating a retrieval object map arranging said retrieval objects on said virtual space on the basis of the position derived.

82- 41. (New) A retrieval object map generating method as set forth in claim 40, wherein each said retrieval object includes a retrieval object describing document which describes the impression of said retrieval object and a supplementary document including said expression word,

said method further including, extracting said expression word from said retrieval object descriptive document and said supplementary document, and

deriving a position of the expression word extracted from said retrieval object descriptive document and said supplementary document utilizing said expression word map.

42. (New) A retrieval object map generating method as set forth in claim 41, wherein each said retrieval object includes attribute information indicative of said retrieval object in addition to said retrieval object descriptive object and said supplementary document.

43. (New) A system for generating a retrieval object map, comprising:  
expression word storage means for pre-storing an expression word map, in which a plurality of expression word expressing impressions of retrieval objects are arranged on a virtual space depending upon the degree of association of the impressions;

retrieval object storage means for pre-storing said plurality of retrieval objects corresponding to said expression words;

a first position deriving means for deriving a position of at least one expression word corresponding to each said retrieval object on said virtual space, wherein when a plurality of expression words correspond to a retrieval

object, the position is defined in the following manner:

if a distance between coordinates of said plurality of expression words is less than or equal to a predetermined distance, average coordinates of the coordinates of said plurality of expression words are taken as coordinates of the position of a single expression word corresponding to said retrieval object, and

if the distance is greater than the predetermined distance, respective coordinates of said plurality of expression words are taken as the derived position; and

a retrieving object map generation means for generating a retrieval object map arranging said retrieval objects on said virtual space on the basis of the derived position.

44. (New) A retrieval object map generating system as set forth in claim 43, wherein said retrieval object storage means stores each said retrieval object including a retrieval object describing document having descriptive text which describes the impression of said retrieval object, and a supplementary document including said expression word, and

said system further includes an expression word extracting means for extracting said expression word from said retrieval object descriptive document and said supplementary document, and

said first position deriving means derives the position of the extracted expression word in said expression word map.

45. (New) A retrieval object map generating system as set forth in claim 44, wherein each said retrieval object stored includes attribute information indicative of said

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retrieval object in addition to said retrieval object descriptive object and said supplementary document.

46. (New) A method for retrieving a retrieval object, the method comprising:  
pre-storing an expression word map, in which a plurality of expression words expressing impressions of retrieval objects are arranged on a virtual space depending upon a degree of association of the impressions;

pre-storing a plurality of the retrieval objects;

deriving a position of a expression word corresponding to each said retrieval object on said virtual space, wherein when a plurality of expression words correspond to a retrieval object, the position is defined in the following manner:

if a distance between coordinates of said plurality of expression words is less than or equal to a predetermined distance, average coordinates of the coordinates of said plurality of expression words are taken as coordinates of the position of a single expression word corresponding to said retrieval object, and

if the distance is greater than the predetermined distance, respective coordinates of said plurality of expression words are taken as the position of the at least one expression word;

generating a retrieval object map arranging said retrieval objects on said virtual space on the basis of the position derived;

deriving a position of said retrieving word on said virtual space with reference to said expression word map; and

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retrieving the retrieval object including the impression having a closest similarity with the impression of said retrieving word on the basis of the position of said retrieving word in said retrieval object map.

47. (New) A retrieving method as set forth in claim 46, wherein said retrieving the retrieval object retrieves the retrieval object at a position having a smallest distance to the position of the retrieving word.

48. (New) A retrieving method as set forth in claim 46, wherein said retrieving the retrieval object at a position having a first angle with a smallest difference in angle measurement from a second angle corresponding to the retrieved word, wherein the first angle and the second angle are defined by a straight line connecting the position of the retrieving word or the expression word with the origin of said virtual space.

49. (New) A retrieving method as set forth in claims 46 or 47, wherein said retrieval object is data including said expressing word, and said method includes extracting said expression word from said retrieval object and storing said retrieval object corresponding to the extracted expression word.

50. (New) A retrieving method as set forth in claims 46 or 47, wherein said retrieval objects are stored with attribute information indicative of attributes of said retrieval object,

said method further including retrieving retrieval objects having attribute information matching with a given attribute information among said plurality of retrieval objects, and

retrieving the retrieval object including the impression meeting with the impression of said retrieving word among the retrieval objects having the given attribute

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information.

51. (New) A system for retrieving a retrieval object including an impression meeting with an impression of a retrieving word among a plurality of retrieval objects, comprising:

expression word map storage means for pre-storing an expression word map, in which a plurality of expression words expressing impressions of retrieval objects are arranged on a virtual space depending upon a degree of association of the impressions;

retrieval object storage means for pre-storing said plurality of retrieving objects;

a first position deriving means for deriving a position of the expression word corresponding to each said retrieval object on said virtual space, wherein when a plurality of expression words correspond to a retrieval object, the position is defined in the following manner:

if a distance between coordinates of said plurality of expression words is less than or equal to a predetermined distance, average coordinates of the coordinates of said plurality of expression words are taken as coordinates of the position of a single expression word corresponding to said retrieval object, and

if the distance is greater than the predetermined distance, respective coordinates of said plurality of expression words are taken as the position of the at least one expression word,

a retrieving object map generation means for generating a retrieval object map arranging said retrieval objects on said virtual space on the basis of the position of the corresponding expression word,

52 a second position deriving means for deriving a position of said retrieving word on said virtual space with reference to said expression word map, and

a retrieval object retrieving means for retrieving the retrieval object including the impression having a closest similarity with the impression of said retrieving word on the basis of the derived position of said retrieving word in said retrieval object map.

52. (New) A retrieving system as set forth in claim 51, wherein said retrieval object retrieving means retrieves the retrieval object at a position having a smallest distance to the position of the retrieving word.

53. (New) A retrieving system as set forth in claim 51, wherein said retrieving the retrieval object at a position having a first angle with a smallest difference in angle measurement from a second angle corresponding to the retrieved word, wherein the first angle and the second angle are defined by a straight line connecting the position of the retrieving word or the expression word with the origin of said virtual space.

54. (New) A retrieving system as set forth in claims 51 or 52, wherein said retrieval object is data including said expression word, and

said system further including expression word extracting means for extracting said expression word from said retrieval object, and

expression word correspondence means for storing said retrieval object corresponding to the extracted expression word.

55. (New) A retrieving system as set forth in claims 51 or 52, wherein said retrieval objects are stored with attribute information indicative of attributes of said retrieval objects,

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said system further including second retrieval object retrieving means for retrieving retrieval objects corresponding to attribute information matching with a given attribute information among said plurality of retrieval objects, and

said retrieval object retrieving means retrieving the retrieval object including the impression having a closest similarity with the impression of said retrieving word on the basis of the derived position of said retrieving word in said retrieval object map.

56. (New) A computer-readable medium having encoded thereon a computer-readable retrieving program, for use with a computer, the computer including an expression word map, in which a plurality of expression words expressing impressions of retrieval objects on a virtual space depending upon a degree of association of the impressions are arranged, and an image correspondence table storing said plurality of retrieving objects, the retrieving program when executed causing the computer to:

derive a position of the expression word corresponding to each said retrieval object on said virtual space, wherein when a plurality of expression words correspond to a retrieval object, the position is defined in the following manner:

if a distance between coordinates of said plurality of expression words is less than or equal to a predetermined distance, average coordinates of the coordinates of said plurality of expression words are taken as coordinates of the position of a single expression word corresponding to said retrieval object; and

if the distance is greater than the predetermined distance, respective coordinates of said plurality of expression words are taken as the position of the



62 at least one expression word; and

generate a retrieval object map arranging said retrieval objects on said virtual space on the basis of the derived position;

derive a position of said retrieving word on said virtual space with reference to said expression word map; and

retrieve the retrieval object of including the impression having a closest similarity with the impression of said retrieving word on the basis of the position of said retrieving word in said retrieval object map.

57. (New) A method for generating a graphic image map, comprising:

pre-storing an expression word map, in which a plurality of expression words expressing impressions of the graphic images are arranged on a virtual space depending upon the degree of association of the impressions;

pre-storing said plurality of graphic images corresponding to said expression words;

deriving a position of the expression word corresponding to each said graphic image on said virtual space, wherein when a plurality of expression words correspond to a graphic image, the position is defined in the following manner:

if a distance between coordinates of said plurality of expression words is less than or equal to a predetermined distance, average coordinates of the coordinates of said plurality of expression words are taken as coordinates of the position of a single expression word corresponding to said graphic image, and

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if the distance is greater than the predetermined distance, respective coordinates of said plurality of expression words are taken as the position of the at least one expression word; and

generating a graphic image map arranging said graphic images on said virtual space on the basis of the derived position.

58. (New) A graphic image map generating method as set forth in claim 57, wherein each said graphic image further includes a graphic image describing document having descriptive text which describes the impression of said graphic image, and a supplementary document including said expression word,

extracting said expression word from said graphic image descriptive document and said supplementary document, and

deriving the position of the expression word extracted from said graphic image descriptive document and said supplementary document utilizing said expression word map.

59. (New) A graphic image map generating method as set forth in claim 58, wherein each said graphic image includes attribute information indicative of said graphic image in addition to said graphic image descriptive object and said supplementary document.

60. (New) A system for generating a graphic image map, comprising:  
expression word storage means for pre-storing an expression word map, in which a plurality of expression words expressing impressions of graphic images are arranged on the virtual space depending upon a degree of association of the impressions;

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graphic image storage means for pre-storing said plurality of graphic images corresponding to said expression words;

a first position deriving means for deriving a position of the expression word corresponding to each said graphic image in said virtual space, wherein when a plurality of expression words correspond to a graphic image, the position is defined in the following manner:

if a distance between coordinates of said plurality of expression words is less than or equal to a predetermined distance, average coordinates of the coordinates of said plurality of expression words are taken as coordinates of the position of a single expression word corresponding to said graphic image, and

if the distance is greater than the predetermined distance, respective coordinates of the coordinates of said plurality of expression words are taken as the position of the at least one expression word; and

a graphic image map generation means for generating a graphic image map arranging said graphic images on said virtual space on the basis of the position derived.

61. (New) A graphic image map generating system as set forth in claim 60, wherein each said graphic image further include a graphic image describing document having descriptive text which describes the impression for said graphic image, and a supplementary document including said expression word,

extracting said expression word from said graphic image descriptive document and said supplementary document with reference to said expression word map, and deriving the position of the expression word utilizing the expression word map.

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62. (New) A graphic image map generating system as set forth in claim 61, wherein each said graphic image further include attribute information indicative of said graphic image in addition to said graphic image descriptive object and said supplementary document.

63. (New) A method for retrieving a graphic image including an impression corresponding to an impression of a retrieving word among a plurality of graphic images, comprising:

pre-storing an expression word map, in which a plurality of expression words expressing impressions of graphic images are arranged on a virtual space depending upon a degree of association of the impressions;

pre-storing said plurality of graphic images;

deriving a position of the expression word corresponding to each said graphic image on said virtual space, wherein when a plurality of expression words correspond to said a graphic image, the position is defined in the following manner:

if a distance between coordinates of said plurality of expression words is less than or equal to a predetermined distance, average coordinates of the coordinates of said plurality of expression words are taken as coordinates of the position of a single expression word corresponding to said graphic image, and

if the distance is greater than the predetermined distance, respective coordinates of said plurality of expression words are taken as the position of the at least one expression word;

generating a graphic image map arranging said graphic images on said virtual space on the basis of the derived position,

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deriving a position of said retrieving word on said virtual space with reference to said expression word map, and

retrieving the graphic image of the impression having a closest similarity with said impression of said retrieving word on the basis of the derived position of said retrieving word in said graphic image map.

64. (New) A retrieving method as set forth in claim 63, wherein retrieving the graphic image includes retrieving the graphic image at a position having a smallest distance to the position of the retrieving word.

65. (New) A retrieving method as set forth in claim 63, wherein said retrieving the graphic image includes retrieving a graphic image at a position having a first angle with a smallest difference in angle measurement from a second angle corresponding to the retrieved word, wherein the first angle and the second angle are defined by a straight line connecting the position of the retrieving word or the expression word with the origin of said virtual space.

66. (New) A retrieving method as set forth in claims 63 or 64, wherein each said graphic image includes attribute information indicative of attributes of said graphic image,

said retrieving method further including retrieving graphic images including the attribute information matching with a given attribute information, and

retrieving the graphic image including the impression meeting with the impression of said retrieving word among the graphic images matching with the given attribute information.

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67. (New) A system for retrieving a graphic image, comprising:

expression word map storage means for pre-storing an expression word map, in which a plurality of expression words expressing impressions of graphic images are arranged on a virtual space depending upon a degree of association of the impressions; graphic image storage means for pre-storing said plurality of graphic images, a first position deriving means for deriving a position of the expression word corresponded to each said graphic image on said virtual space, wherein when a plurality of expression words correspond to a graphic image, the position is defined in the following manner:

if a distance between coordinates of said plurality of expression words falls within or at a predetermined distance, average coordinates of the coordinates of said plurality of expression words are taken as coordinates of the position of a single expression word corresponding to said graphic image, and if the distance is greater than the predetermined distance, respective coordinates of said plurality of expression words are taken as the position of the at least one expression word;

a graphic image map generation means for generating a graphic image map arranging said graphic images on said virtual space on the basis of the derived position;

a second position deriving means for deriving a position of said retrieving word on said virtual space with reference to said expression word map; and

graphic image retrieving means for retrieving the graphic image including the impression having a closest similarity with the impression of said retrieving word, on the basis of the position derived at said second position deriving means.

68. (New) A retrieving system as set forth in claim 67, wherein said graphic image retrieving means retrieves the graphic image at a position having a smallest distance to the position derived at said second position deriving means utilizing said graphic image map.

69. (New) A retrieving system as set forth in claim 67, wherein said retrieving the graphic image includes retrieving the graphic image at a position having a first angle with a smallest difference in angle measurement from a second angle corresponding to the retrieved word, wherein the first angle and the second angle are defined by a straight line connecting the position of the retrieving word or the expression word with the origin of said virtual space.

70. (New) A retrieving system as set forth in claims 67 and 68, wherein each said graphic image includes attribute information indicative of attributes of said graphic image,

the system further including a second graphic image retrieving means to retrieve graphic images having the attribute information matching with a given attribute information, and

said graphic image retrieving means to retrieve the graphic image including the impression having a closest similarity with the impression of said retrieving word among the graphic images retrieved at said second graphic image retrieving means.

71. (New) A retrieving method as set forth in claims 67 or 68, which is applied for retrieval of hair style graphic images which express hair styles.

72. (New) A retrieving method as set forth in claim 71, wherein said virtual space is a coordinate system having a first axis and a second axis perpendicular to said first axis,

said first axis has a measurement of dynamic in an axial direction and a measurement of smart as quantified in the other direction, and

said second axis has a measurement of masculine in one axial direction and a measurement of femininity in the other direction.

73. (New) A retrieving method as set forth in claim 71, wherein said virtual space is a coordinate system having a first axis and a second axis perpendicular to said first axis,

said first axis has a measurement of dynamic in one axial direction and a measurement of smart in the other direction, and

the second axis has a measurement of heavy in one axial direction and a measurement of light in the other direction.

74. (New) A computer-readable medium having encoded thereon a computer-readable graphic image retrieval program, installed on a computer where the computer includes an expression word map, in which a plurality of expression words expressing impressions of graphic images on a virtual space are arranged depending upon a degree of association of the impressions, and an image correspondence table, the graphic image retrieval program, which when executed causes the computer to:

derive a position of an expression word corresponding to each said graphic image on said virtual space, wherein when a plurality of expression words correspond to a graphic image, the position is defined in the following



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manner:

if a distance between coordinates of said plurality of expression words less than or equal to a predetermined distance, average coordinates of the coordinates of said plurality of expression words are taken as coordinates of the position of a single expression word corresponding to said graphic image, and

If the distance is greater than the predetermined distance, respective coordinates of said plurality of expression words are taken as the position of the at least one expression word;

generate a graphic image map arranging said graphic images on said virtual space on the basis of the position derived,

derive a position of said retrieving word on said virtual space with reference to said expression word map, and

retrieve the graphic image of the impression having a closest similarity to the impression of said retrieving word on the basis of the derived position of said retrieving word utilizing said graphic image map.

75. (New) A computer-readable medium as set forth in claim 74, wherein said retrieving program which when executed, cause a computer to: encode a graphic image retrieving data for retrieving hair style graphic images of an impression meeting with an impression of a retrieving word among a plurality of hair style graphic images, and

pre-store expression word map, the graphic image map including a plurality of expression words expressing impressions of the hair style graphic images on a virtual space, where the virtual space is a coordinate system having a first axis and a second

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axis perpendicular to said first axis, depending upon a degree of association of the impressions,

said first axis having a measurement of dynamic in one axial direction and having a measurement of smart in the other direction, and

said second axis having a measurement of masculine in one axial direction and a measurement of femininity in the other direction.

76. (New) A computer-readable medium as set forth in claim 74, wherein said retrieval program, which when executed causes the computer to: encode a graphic image retrieving data for retrieving hair style graphic images of an impression meeting with an impression of a retrieving word among a plurality of hair style graphic images, and

pre-store an expression word map, the expression word map including a plurality of expression words expressing impressions of the hair style graphic images on a virtual space, where the virtual space is a coordinate system having a first axis and a second axis perpendicular to said first axis, depending upon a degree of association of the impressions,

said first axis having a measurement of dynamic as quantified in one axial direction and a measurement of smart in the other direction, and

the second axis having a measurement of heavy in one axial direction and a measurement of light in the other direction.

77. (New) A computer-readable medium as set forth in claim 74, wherein said retrieving program, which when executed, causes the computer to: encode a graphic image retrieving data for retrieving hair style graphic images of an impression

12 meeting with an impression of a retrieving word among a plurality of hair style graphic images, and

pre-store a graphic image map, the graphic image map including a plurality of the hair style graphic images on a virtual space, where the virtual space is a coordinate system having a first axis and a second axis perpendicular to said first axis, depending upon a degree of association of the impressions,

said first axis having a measurement of dynamic in one axial direction and a measurement of smart in the other direction, and

said second axis having a measurement of masculine as quantified in one axial direction and a measurement of femininity in the other direction.

78. (New) A computer-readable medium as set forth in claim 74, wherein said retrieving program, which when executed, causes the computer to: encode a graphic image retrieving data for retrieving hair style graphic images of an impression meeting with an impression of a retrieving word among a plurality of hair style graphic images, and

pre-store a graphic image map, the graphic image map including said plurality of hair style graphic images on a virtual space, where the virtual space is a coordinate system having a first axis and a second axis perpendicular to said first axis, depending upon a degree of association of the impressions,

said first axis having a measurement of dynamic in one axial direction and a measurement of smart in the other direction, and

the second axis having a measurement of heavy in one axial direction and a measurement of light in the other direction.